

**Amendments to the Specification:**

Please amend the specification as indicated below.

Please add the following paragraph after the paragraph that begins on page 3, line 27:

Fig. 6 shows a color converter that includes a polymer light guide and a separate layer.

Please replace the paragraph beginning on page 6, line 3 with the following amended paragraph:

The essential element of the sensor is formed by a layer of a  $\text{Pr}^{3+}$ -activated scintillator which converts the input radiation into UV radiation. It is very advantageous when the sensor comprises a layer of  $\text{LaPO}_4:\text{Pr}$ ,  $\text{LuF}_3:\text{Pr}$ ,  $\text{LuCl}_3:\text{Pr}$ ,  $\text{LuBr}_3:\text{Pr}$ ,  $(\text{Lu}_{1-x}\text{Y}_x)\text{PO}_4:\text{Pr}$ , where  $0 \leq x \leq 1$ ,  $(\text{Lu}_{1-x}\text{Y}_x)\text{SiO}_5:\text{Pr}$ ,  $(\text{Lu}_{2-x}\text{Y}_x)\text{SiO}_5:\text{Pr}$ , where  $0 \leq x \leq 1$ ,  $(\text{Lu}_{1-x}\text{Y}_x)\text{Si}_2\text{O}_7:\text{Pr}$ , where  $0 \leq x \leq 1$ ,  $(\text{Lu}_{1-x}\text{Y}_x)\text{BO}_3:\text{Pr}$ , where  $0 \leq x \leq 1$ , or  $\text{Ca}_{1-2y}\text{Li}_2\text{SiO}_4:\text{Pr}_y\text{Na}_y$ , where  $0.001 \leq y \leq 0.2$ . Such  $\text{Pr}^{3+}$ -activated materials emit UV radiation after excitation and have short decay times.

Please replace the paragraph beginning on page 7, line 13 with the following amended paragraph:

In order to enlarge the choice of suitable photodiodes, a color converter 10 which converts UV radiation into radiation of longer wavelength can be arranged between the sensor layer and the layer with the photodiodes. To this end, the color converter 10 contains a luminous substance which can be excited by UV radiation. The color converter 10 thus converts the UV radiation emitted by the sensor into radiation having a wavelength range which corresponds to the maximum of the spectral sensitivity of the

photodiode used. The radiation of longer wavelength may comprise colored light or infrared radiation.

Please replace the paragraph beginning on page 7, line 20 with the following amended paragraph:

For the luminous substances use can notably be made of organic luminous substances with a high photoluminescence quantum efficiency and a short decay time  $\tau$ . Particularly attractive luminous substances are Coumarins such as Coumarin 1 ( $\lambda_{\max} = 430$  nm) or Courmarin 120 ( $\alpha_{\max} = 442$  nm) or ~~lumogen~~ Lumogen dyes such as Lumogen F Violet 570 marketed by BASF. The decay times  $\tau$  of these luminous substances are less than 10 ns.

Please replace the paragraph beginning on page 7, line 26 with the following amended paragraph:

The Turning briefly to Fig. 6, the color converter 10 may comprise, for example, a polymer light guide 11 which is doped with the luminous substance. The polymer light guide 11 may contain, for example, polymethylmethacrylate, polystyrol, polytetrafluoroethylene, polycarbonate, polyimide or polyvinylchloride. Alternatively, the color converter 10 may comprise two components, that is, the polymer light guide 11 and a separate layer 12 with the luminous substance. In this embodiment the polymer light guide 11 adjoins the sensor layer of the acquisition element; the separate layer 12 with the luminous substance adjoins the polymer light guide 11 and is adjoined itself by the layer with the photodiodes.